



Explorers Program Overview

**2022 Heliophysics
SMEX Concept Study Kickoff**

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Explorers Program Overview (1 of 2)



- NASA's oldest, continuous program
 - Over 100 successful missions since 1958
- Program Objective—Frequent flight opportunities for world-class scientific investigations
- Uncoupled program of missions with unique science capabilities supporting heliophysics and astrophysics science goals



Explorers Program Overview (2 of 2)



- Mission class characterized by size, schedule, and budget cost caps
 - MIDEX
 - SMEX
 - Mission of Opportunity
- Missions solicited through Announcement of Opportunity
- Missions developed in Principal Investigator mode
- Mission oversight provided by the Explorers Program Office at GSFC



Explorers Missions



MIDEX



SMEX



UNEX • MO • INTERNATIONALS



 Astrophysics Missions

 Current Astrophysics Missions

 Heliophysics Missions

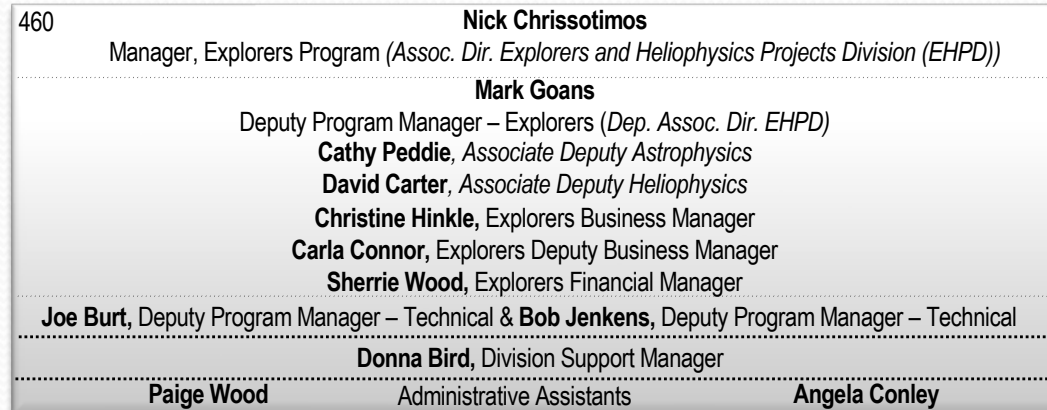
 Current Heliophysics Missions



Explorers Program Organization Chart (1 of 2)



SMD
Astrophysics & Heliophysics Divisions



Systems Engineering
John Staren

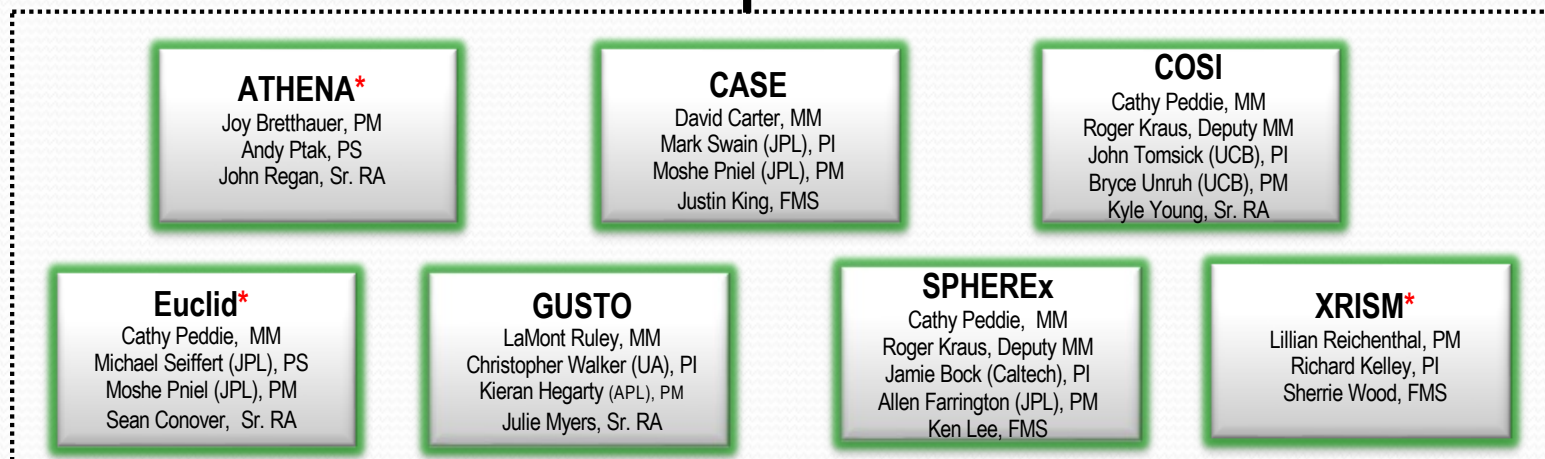
Mission Assurance
Joe Calabrese

Business Pool
Procurement | Proj. Support | Financial

LV Liaison
Tom Jones

Rideshare Office
Keith Chamberlin

**Explorers/
Astrophysics**



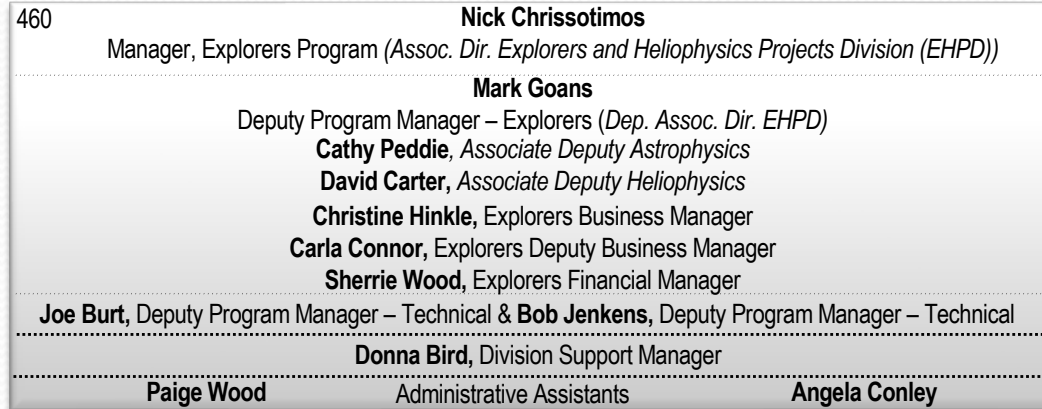
*Strategic Missions



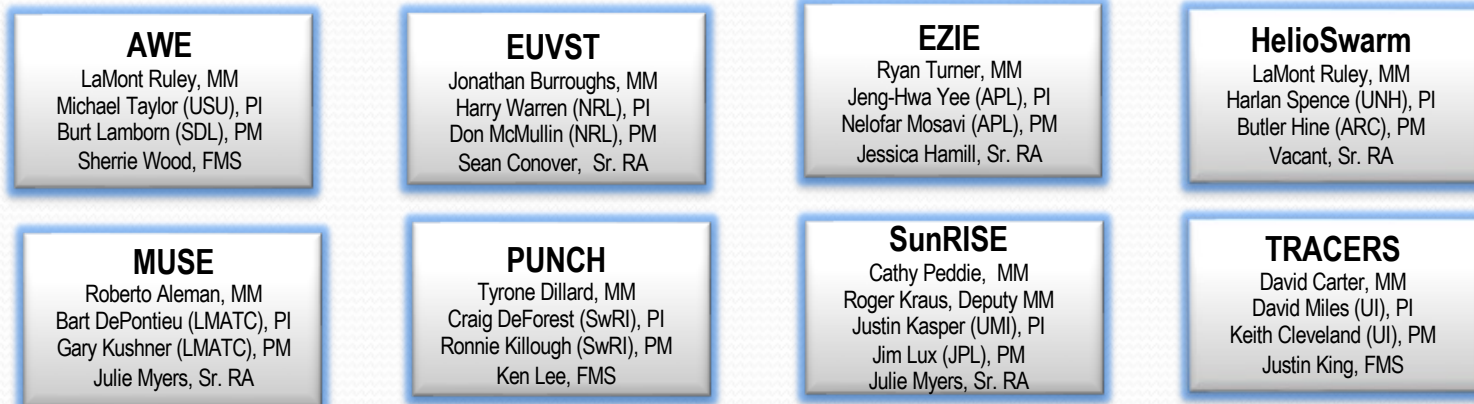
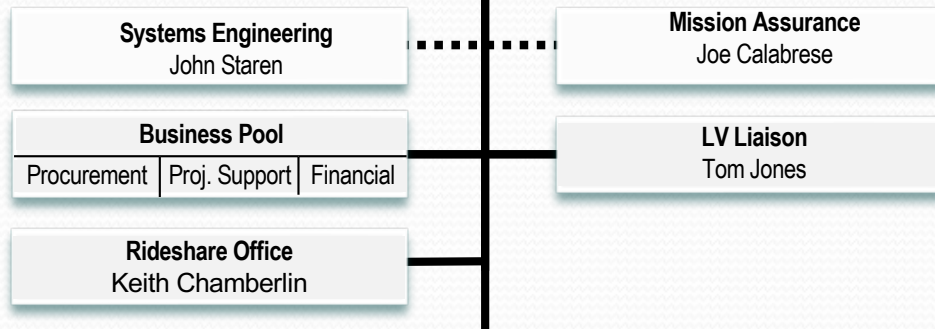
Explorers Program Organization Chart (2 of 2)



SMD
Astrophysics & Heliophysics Divisions



**Explorers/
Heliophysics**





Explorers Program Office

Roles/Responsibilities (1 of 2)



- Support the Principal Investigator in achieving mission success and ensure that the mission complies with all applicable government and NASA-specific policies and regulations.
 - Provide comprehensive oversight of the mission development process by conducting ongoing assessments of the mission's cost, schedule and technical progress.
 - Provide mission status to NASA GSFC and HQ through monthly reviews, weekly reporting and timely notification of problems & resolution plans.
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Explorers Program Office

Roles/Responsibilities (2 of 2)



- Coordinate the provision of certain services and equipment as required, such as space communication support, launch services, etc.
- Provide recommendations for the chair and membership of the Standing Review Board.
- Appoint a Mission Manager for full missions not managed by GSFC and all missions of opportunity.



Mission Manager Roles/Responsibilities



The Mission Manager will:

- Serve as the Goddard point of contact and the Contracting Officer's Representative or Task Monitor, as required.
 - Lead the GSFC engineering, mission assurance and business teams in obtaining detailed cost, schedule and technical insight to facilitate reporting to GSFC and HQ.
 - Provide access to the Goddard services and support as requested (e.g., EEE parts lab, board coupon testing, materials lab, SMA services and engineering services).
 - Ensure that adequate government resources are applied to the mission as required.
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Explorers Program Team



- Mission Manager
- Systems Engineer
- Instrument Systems Engineer
- Mission Assurance Lead
- Senior Resource Analyst
- Scheduling/Planning
- Configuration Management

- Other Program Support Available:
 - Instrument Systems
 - Electrical Systems
 - Mechanical Systems
 - Quality Engineering
 - System Safety
 - EVM Lead



Available Goddard Services



- Available GSFC services include:
 - EEE parts testing
 - Radiation effects analysis/testing
 - Materials engineering support (includes board coupon testing)
 - Thermal coatings engineering support
 - Discipline engineering support
 - Space communications support
 - Instrument detector systems support
 - Tiger Team and Anomaly Review Team Support